Scientists Recognized for Outstanding Achievements by Affiliate Societies Council

Payoff

Five scientists from the Materials and Manufacturing Directorate (ML), recognized for their outstanding contributions, were selected for ASC awards. Their combined efforts supported and strengthened Air Force operational requirements and have helped make the nation's commercial industries more internationally competitive. Their selection greatly enhances ML's reputation as a world leader in materials and manufacturing research and development.

Accomplishment

The Affiliate Societies Council (ASC) of Dayton recognized five scientists in ML for outstanding achievements during 1998. Dr. Steven R. LeClair, Dr. Daniel B. Miracle, Dr. Laigudi V. Natarajan, Dr. Richard L. Sutherland, and Dr. Frank Szmulowicz were honored for outstanding contributions that helped strengthen national defense and enabled greater U.S. global competitiveness. The ASC is comprised of representatives from about 50 engineering and science-related professional societies whose combined membership exceeds 15,000.

Background

Every year, the ASC recognizes engineers and scientists throughout the Dayton (Miami Valley) region for outstanding accomplishments in their field. Five of the 14 individuals honored for significant contributions in 1998 were from the Air Force Research Laboratory's (AFRL's) ML Directorate. Dr. Steven R. LeClair has been branch chief of the Manufacturing Technology Division's Materials Process Design Branch since 1990. His responsibilities include leading an Air Force Office of Scientific Research basic research task in developing advanced computational methods applied to design tasks, and leading a major in-house research program in materials processing and planning long-term investment in processing research. Dr. Daniel B. Miracle is a materials research scientist in the Metals Development and Materials Processing Branch of the Metals, Ceramics, and Nondestructive Evaluation Division. Dr. Miracle leads a research team establishing the fundamental scientific principles required for implementing materials with high specific stiffness, a technology with critical impact on all aerospace technology sectors, including propulsion, aeronautical structures, space launch vehicles, spacecraft, missiles and electronics. Dr. Lalgudi V. Natarajan from the Electromagnetic Materials and Survivability Division's Hardened Materials Branch is currently the project leader for development of technology based on switchable reflection filters formed using holographic liquid crystals. Dr. Richard L. Sutherland, also a scientist with the Hardened Materials Branch, is internationally known for his work on electrically switchable holograms and is widely recognized as an expert in the field of nonlinear optics. Dr. Frank Szmulowicz, a senior physicist with the Electromagnetic Materials and Survivability Division's Sensor Materials Branch, has been a leader in advancing the fundamental understanding of design issues affecting the development of several generations of infrared detector materials.